

OPENING STATEMENT

Ranking Member Donna F. Edwards (D-MD)
Subcommittee on Space
Committee on Science, Space, and Technology

*“Searching for the Origins of the Universe:
An Update on the Progress of the James Webb Space Telescope”*
Space Subcommittee Hearing

March 24, 2015

Good Morning, and welcome to our distinguished panel of witnesses.

Mr. Chairman, thank you for calling this hearing to evaluate the development of the James Webb Space Telescope--known as JWST-- and discuss the science that the observatory will enable. This hearing comes at a fortuitous time, on the eve of the 25th Anniversary of the Hubble Space Telescope. Launched in April 1990, Hubble was the first major optical space-based observatory orbiting above the distortion of the atmosphere, and above rain, clouds, and light pollution. Many of today’s younger generation have grown up with Hubble, and I dare say that most Americans have seen the awe-inspiring image taken by Hubble of the iconic Eagle Nebula capturing the famous "Pillars of Creation"

JWST is the next generation astrophysics observatory following Hubble. More capable and sensitive than Hubble, JWST is optimized to study infrared light from the Universe, which will allow JWST to observe the first galaxies formed in the Universe. In addition, JWST will see solar systems forming in in our galaxy and possibly detect the presence of liquid water on planets around other stars—an indicator that such a planet may harbor life. Mr. Chairman, that is exciting and why I just can’t wait for JWST to be launched and working.

But I also recognize that the road to building JWST has not been an easy one. The observatory’s history of cost growth and schedule delays has not gone unnoticed by the Congress. An independent review panel found in October 2010 that a substantial funding increase would be needed to complete the observatory. As a consequence, NASA rebaselined the project in 2011 with a life cycle cost estimate of \$8.8 billion and a launch readiness date of October 2018. Congress has done its share and funded JWST annually consistent with that rebaseline. We need to continue doing so.

The Consolidated and Further Continuing Appropriations Act of 2012 directed the Government Accountability Office (GAO) to report on the project on an annual basis. I appreciate GAO keeping Congress informed. With launch now a little more than three years away and major integration tests looming ahead, NASA will be under pressure to demonstrate that it can meet the launch date within the cost estimate. And although the latest GAO report concludes that JWST remains on schedule and on budget, GAO also reported that “[T]echnical challenges with JWST elements and major subsystems, however, have diminished the project’s overall schedule reserve and increased risk.”

At today's hearing, I hope to get answers on the following questions:

- *What progress is being made in preparing scientific investigations and scientists who will capitalize on JWST's unique capabilities?*
- *With three years until launch, what technical challenges and associated risks still remain?*
- *What steps are being taken by NASA and its contractors to ensure that cost and schedule commitments are met? And*
- *What is the level of confidence that NASA will be able to meet the October 2018 launch date?*
- Again, I want to thank our witnesses for appearing before our Subcommittee, and I look forward to your testimony.

Mr. Chairman, I yield back.